



## Validation of Electronic Surveillance Healthcare Data

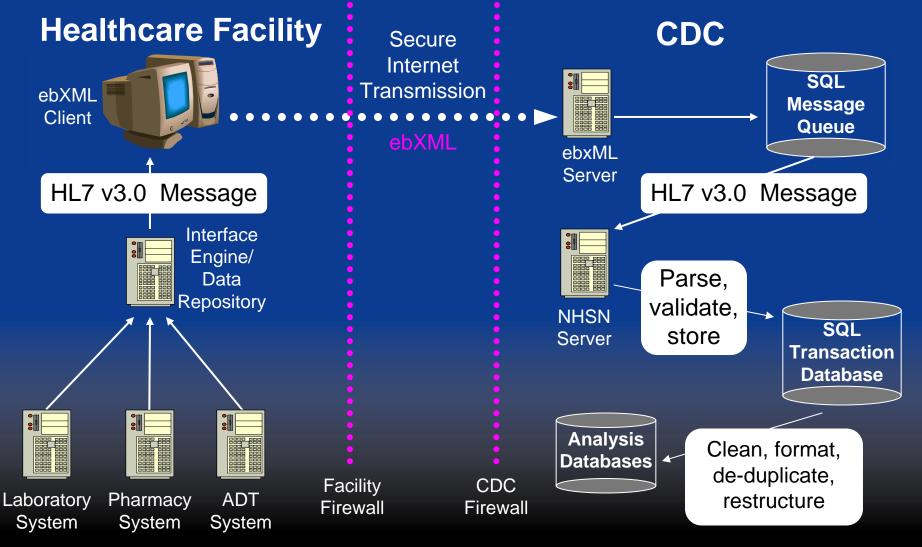
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# Mission of the Division of Healthcare Quality Promotion (DHQP)

- Protect patients
- Protect healthcare personnel
- Promote safety, quality, and value in the healthcare delivery system

## Data Transmission and Manipulation Overview



#### Information Collected

- Accession #
- Demographic info
- Location in facility
- Isolate #
- Source

- Organism
- Organism Status
- Drug tested
- Raw result (MIC, zone size)
- SIR

### DHQP V3 Message Features

- Follows balloted RIM when possible
- Coded elements have standard vocabulary
  - ◆LOINC, SNOMED, HL7 V3 (Gender, race, ethnicity, units of measure, GTS), ICD-9, NDC, RX-Norm
- Each coded element has a standard, owner, and transmitter code

## Validation Steps

- Document missing values
- Document invalid values
- Compare local text to standard code
- Replicate basic frequencies
- Replicate analyses

## Missing values

- Is missing a valid option?
- Accession #'s without results
- Local codes present for missing standard codes

#### Invalid Values

- Standard code fields containing local codes
- Wrong codes
- Method nonspecific LOINC codes

## Compare Local and Standard Codes

- Multiple local codes to single standard code
- Gram-negative cultures coded "No Growth"
- Coagulase-negative staphylococcus coded "No Growth"

## Replicate Frequencies

- Query original database coded values and description
- Compare with receiver's database

## Replicate Analysis

- Reproduce Antibiogram
  - ◆ Must have selection rules
    - **★** Specimen source
    - **★** Duplication rules
  - ◆ Must run additional queries to resolve issues

## Example Antibiogram

	Us	Them
Staph. areus	15	16
Oxacillin Resistant	4	3

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#### General Issues

- How are contaminated/unacceptable samples handled?
- Are isolate numbers unique?





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